

ABSTRACT

5 A variable geometry turbocharger employs multiple vanes in the
turbine inlet with a unison ring and integral cast wall in the turbine housing
forming the nozzle walls. The unison ring incorporates actuation slots
receiving tabs on the vanes for opening the closing the nozzle area upon
rotation of the unison ring. An integral electrohydraulic actuator rotates the
unison ring through a rack and pinion driven crank shaft with direct position
10 feedback to the spring biased variable current solenoid via a cam on the crank
shaft.